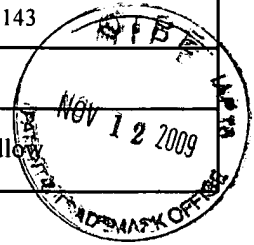


FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/775,599	ATTY. DOCKET NO.: C0989.70030USUS01
				FILING DATE: February 10, 2004	CONFIRMATION NO.: 2143
				APPLICANT: Eugene Y. Chan et al.	
				GROUP ART UNIT: 1797	EXAMINER: Jan M. Ludlow
Sheet	1	of	5		



U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
		4,147,621		Giddings	04-1979
		4,833,332		Robertson, Jr. et al.	05-23-1989
		4,979,824		Mathies et al.	12-25-1990
		5,141,651		Giddings	08-25-1992
		5,274,240		Mathies et al.	12-28-1993
		5,304,487		Wilding et al.	04-19-1994
		5,324,401		Yeung et al.	06-28-1994
		5,374,527		Grossman	12-20-1994
		5,599,664		Schwartz et al.	02-04-1997
		5,699,157		Parce	12-16-1997
		5,720,928		Schwartz et al.	02-24-1998
		5,846,727		Soper et al.	12-08-1998
		5,879,625		Roslaniec et al.	03-09-1999
		5,906,723		Mathies et al.	05-25-1999
		6,001,229		Ramsey	12-14-1999
		6,015,714		Baldarelli et al.	01-18-2000
		6,100,541		Nagle et al.	08-08-2000
		6,120,666		Jacobson et al.	09-19-2000
		6,150,089		Schwartz	11-21-2000
		6,210,973	B1	Petit	04-03-2001
		6,214,246	B1	Craighead	04-10-2001
		6,294,136	B1	Schwartz	09-25-2001
		6,319,469	B1	Mian et al.	11-20-2001
		6,432,630	B1	Blankenstein	08-13-2002
		6,562,307	B1	Schuch et al.	05-13-2003
		6,641,708	B1	Becker et al.	11-04-2003
		6,660,480	B2	Ramsey et al.	12-09-2003
		6,767,731	A1	Hannah et al.	07-27-2004
		7,351,538	B2	Fuchs et al.	04-01-2008
		7,371,520	B2	Zhao et al.	05-13-2008

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/775,599		ATTY. DOCKET NO.:C0989.70030USUS01		
				FILING DATE: February 10, 2004		CONFIRMATION NO.: 2143		
				APPLICANT: Eugene Y. Chan et al.				
				GROUP ART UNIT: 1797		EXAMINER: Jan M. Ludlow		
Sheet	2	of	5					

		7,402,422	B2	Fuchs et al.	07-22-2008
		7,595,160	B2	White et al.	09-29-2009
		2001-0030130	A1	Ricco et al.	10-18-2001
		2002-0008028	A1	Jacobson et al.	01-24-2002
		2002-0029814	A1	Unger et al.	03-14-2002
		2002-0034748	A1	Quake et al.	03-21-2002
		2002-0039737	A1	Chan et al.	04-04-2002
		2002-0055167	A1	Pourahmadi et al.	05-09-2002
		2002-0058332	A1	Quake et al.	05-16-2002
		2002-0072243	A1	Craighead et al.	06-13-2002
		2002-0079008	A1	Chien et al.	06-27-2002
		2002-0110495	A1	Hunt et al.	08-15-2002
		2003-0162181	A1	Yang et al.	08-28-2003
		2004-0126279	A1	Renzi et al.	07-01-2004
		2004-0188254	A1	Spaid	09-30-2004
		2005-0148064	A1	Yamakawa et al.	07-07-2005
		2006-0191792	A1	Herr et al.	08-31-2006
		2008-0085552	A1	Larson et al.	04-10-2008
		2008-0103296	A1	Zhao et al.	05-01-2008
		2008-0254549	A1	Fuchs et al.	10-16-2008

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
		WO	00/50172	A1	Caliper Technologies Corp.	08-31-2000	
		WO	00/70080	A1	Caliper Technologies Corp.	11-23-2000	
		WO	02/29106	A2	California Institute of Technology	04-11-2002	
		WO	02/099398	A1	U.S. Genomics, Inc.	12-12-2002	
		WO	02/101095	A1	U.S. Genomics, Inc.	12-19-2002	
		WO	02/101353	A2	U.S. Genomics, Inc.	12-19-2002	
		WO	03/025540	A2	U.S. Genomics, Inc.	03-27-2003	
		WO	03/091455	A1	U.S. Genomics, Inc.	11-06-2003	
		WO	03/100101	A1	U.S. Genomics, Inc.	12-04-2003	
		WO	2004/007692	A2	U.S. Genomics, Inc.	01-22-2004	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/775,599		ATTY. DOCKET NO.:C0989.70030USUS01	
				FILING DATE: February 10, 2004		CONFIRMATION NO.: 2143	
				APPLICANT: Eugene Y. Chan et al.			
				GROUP ART UNIT: 1797		EXAMINER: Jan M. Ludlow	
Sheet	3	of	5				

		WO	2004/048514	A2	U.S. Genomics, Inc.	06-10-2004	
		WO	2004/066185	A1	U.S. Genomics, Inc.	08-05-2004	
		WO	2009/009127	A2	U.S. Genomics, Inc.	01-15-2009	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
		AMBROSE et al., Application of single molecule detection to DNA sequencing and sizing, Ber. Bunsenges. Phys. Chem. 1993; 97:1535-1542.	
		BELLO et al, Electroosmosis of polymer solutions in fused silica capillaries. Electrophoresis. 1994 May;15(5):623-6.	
		BEZRUKOV et al., Counting polymers moving through a single ion channel. Nature. 1994 Jul 28;370(6487):279-81.	
		BOONE et al., Plastic advances microfluidic devices. Anal Chem. 2002 Feb 1;74(3):78A-86A.	
		BURNS et al., An integrated nanoliter DNA analysis device. Science. 1998 Oct 16;282(5388):484-7. (Abstract Only).	
		BUSTAMANTE et al., Direct observation and manipulation of single DNA molecules using fluorescence microscopy. Annu Rev Biophys Biophys Chem. 1991;20:415-46.	
		CHAN et al., DNA mapping technology based on microfluidic stretching and single-molecule detection of motif tags. Biophys J. 2003;84:302A. Poster 1470. Board #B725.	
		CHAN et al., DNA mapping using microfluidic stretching and single-molecule detection of fluorescent site-specific tags. Genome Res. 2004 Jun;14(6):1137-46.	
		CHEEK et al., Chemiluminescence detection for hybridization assays on the flow-thru chip, a three-dimensional microchannel biochip. Anal Chem. 2001 Dec 15;73(24):5777-83.	
		CHEN et al., Single-Molecule Detection in Capillary Electrophoresis: Molecular Shot Noise as a Fundamental Limit to Chemical Analysis. Anal. Chem. 1996 Feb 15;68(4):690-6.	
		CHURCH et al., Multiplex DNA sequencing. Science. 1988 Apr 8;240(4849):185-8.	
		D'ANTONI et al., Single Molecule Detection of Proteins Using Microfluidic Fluorescence Detection. ORC Poster. April 2006.	
		DAVIS et al., Rapid DNA Sequencing Based on Single-Molecule Detection. Los Alamos Science. 1992; 20:280-6.	
		FOQUET et al., DNA fragment sizing by single molecule detection in submicrometer-sized closed fluidic channels. Anal Chem. 2002 Mar 15;74(6):1415-22. (Abstract Only).	
		GOODWIN et al., Spatial dependence of the optical collection efficiency in flow cytometry. Cytometry. 1995 Oct 1;21(2):133-44.	
		GURRIERI et al., Imaging of kinked configurations of DNA molecules undergoing orthogonal field alternating gel electrophoresis by fluorescence microscopy. Biochemistry. 1990 Apr 3;29(13):3396-401. (Abstract Only).	
		GURRIERI et al., Purification and staining of intact yeast DNA chromosomes and real-time observation of their migration during gel electrophoresis. Biochem J. 1997 Aug 15;326 (Pt 1):131-8.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/775,599	ATTY. DOCKET NO.: C0989.70030USUS01
				FILING DATE: February 10, 2004	CONFIRMATION NO.: 2143
				APPLICANT: Eugene Y. Chan et al.	
				GROUP ART UNIT: 1797	EXAMINER: Jan M. Ludlow
Sheet	4	of	5		

	HAAB et al., Single molecule fluorescence burst detection of DNA fragments separated by capillary electrophoresis. Anal Chem. 1995 Sep 15;67(18):3253-60.	
	HAN et al., Separation of long DNA molecules in a microfabricated entropic trap array. Science. 2000 May 12;288(5468):1026-9.	
	HARDING et al., Single-molecule detection as an approach to rapid DNA sequencing. Trends Biotechnol. 1992 Jan-Feb;10(1-2):55-7.	
	HERRICK et al., Single molecule analysis of DNA replication. Biochimie. 1999 Aug-Sep;81(8-9):859-71.	
	HOLZWARTH, The acceleration of linear DNA during pulsed-field gel electrophoresis. Biopolymers. 1989 Jun;28(6):1043-58.	
	HOLZWARTH et al., Transient orientation of linear DNA molecules during pulsed field gel electrophoresis. Nucleic Acids Res. 1987 Dec 10;15(23):10031-44.	
	KASIANOWICZ et al., Characterization of individual polynucleotide molecules using a membrane channel. Proc Natl Acad Sci U S A. 1996 Nov 26;93(24):13770-3.	
	KASIANOWICZ et al., Polymer transport in the alpha-hemolysin ion channel. Page 111. Abstract 26.	
	LARSON et al., Single DNA molecule stretching in sudden mixed shear and elongational microflows. Lab Chip. 2006;6(9):1187-1199.	
	LEE et al., Diffusion of a polymer chain through a thin membrane. J Phys II France, 1996 Feb; 6:195-204.	
	LEE et al., Laser-induced fluorescence detection of a single molecule in a capillary. Anal Chem. 1994 Dec 1;66(23):4142-9.	
	LEE et al., Micro flow cytometers with buried SU-8/SOG optical waveguides. Sensors and Actuators. 2003;103:165-70.	
	NGUYEN et al., Detection of Single Molecules of Phycoerythrin in Hydrodynamically Focused Flows by Laser-Induced Fluorescence. Anal. Chem., September 1, 1987; 59:2158-61. (Abstract Only).	
	OANA et al., Visualization of a specific sequence on a single large DNA molecule using fluorescence microscopy based on a new DNA-stretching method. Biochem Biophys Res Commun. 1999 Nov;265(1):140-3.	
	PHILLIPS et al., Application of single molecule technology to rapidly map long DNA and study the confirmation of stretched DNA. Nuc Acids Res. 2005;33(18):5829-5837.	
	RAMPINO et al., Apparatus for gel electrophoresis with continuous monitoring of individual DNA molecules by video epifluorescence microscopy. Anal Biochem. 1991 May 1;194(2):278-83.	
	ROULET et al., Fabrication of multilayer systems combining microfluidic and microoptical elements for fluorescence detection. J Micro Systms. 2001 Dec;10(4):482-91.	
	ROULET et al., Performance of an integrated microoptical system for fluorescence detection in microfluidic systems. Anal Chem. 2002 Jul 15;74(14):3400-7.	
	SOPER et al., Nanoliter-scale sample preparation methods directly coupled to polymethylmethacrylate-based microchips and gel-filled capillaries for the analysis of oligonucleotides. J. of Chroma. A. 1999; 853:107-20.	
	WABUYELE et al., Single molecule detection of double-stranded DNA in poly(methylmethacrylate) and polycarbonate microfluidic devices. Electrophoresis. 2001	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/775,599	ATTY. DOCKET NO.: C0989.70030USUS01
				FILING DATE: February 10, 2004	CONFIRMATION NO.: 2143
				APPLICANT: Eugene Y. Chan et al.	
				GROUP ART UNIT: 1797	EXAMINER: Jan M. Ludlow
Sheet	5	of	5		

		Oct;22(18):3939-48. (Abstract Only).	
		WANG et al., Rapid sizing of short tandem repeat alleles using capillary array electrophoresis and energy-transfer fluorescent primers. Anal. Chem. 1995;67:1197-203.	
		WANG, Y. et al., High-resolution capillary array electrophoretic sizing of multiplexed short tandem repeat loci using energy-transfer fluorescent primers. Electrophoresis. 1996;17:1485-1490.	
		WATSON et al., The early fluidic and optical physics of cytometry. Cytometry. 1999 Feb 15;38(1):2-14.	
		WHITESIDES et al., Fabrication of Complex, 3D Microstructures. Harvard MRSEC – Research Nuggets. Materials Research Science and Engineering Center. 2 pages.	
		WHITESIDES et al., Flexible Methods for Microfluidics: Devices for handling nanoliter quantities of fluids are creating new fabrication challenges and finding new applications in biology, chemistry, and materials science. Physics Today Online. June 2001, 8 pages.	
		WHITESIDES et al., Generating Microgradients. Harvard MRSEC – Research Nuggets. Materials Research Science and Engineering Center. February 2, 2001. 1 page.	
		WHITESIDES et al., Three-Dimensional Networks of Fluid Channels in PDMS. Harvard MRSEC – Research Nuggets. Materials Research Science and Engineering Center. June 1, 2000. 1 page.	
		WILDING, et al., Manipulation and flow of biological fluids in straight channels micromachined in silicon. Clin. Chem. 1994;40(1): 43-47. (Abstract Only).	
		WONG et al., Deformation of DNA molecules by hydrodynamic focusing. J Fluid Mech. 2003;497:55-65.	
		WONG et al., Direct Manipulation of DNA Molecules Using Hydrodynamic Force. 2002 IEE International Conference on Robotics and Automation. Washington, D.C. May 12, 2002.	

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.